File 348:EUROPEAN PATENTS 1978-2003/Aug W05
File 349:PCT FULLTEXT 1979-2002/UB=20030904,UT=20030828

Set	Items	Description
S1	34	AU='SOSIN HOWARD' OR AU='SOSIN HOWARD B'
S2	201056	COLOR? ? OR COLOUR? ?
S3	**7**	**S1 AND S2 [1 duplicate, 6 not relevant]**

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200358
File 347:JAPIO Oct 1976-2003/May(Updated 030902)
File 371:French Patents 1961-2002/BOPI 200209

Set	Items	Description
S1	15	AU='SOSIN H B'
S2	9	AU='SOSIN H'
S3	22	S1:S2
S4	515419	COLOR? ? OR COLOUR? ?
S5	**1**	**S3 AND S4**

5/34/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014778455 **Image available**
WPI Acc No: 2002-599161/200264
Artificial turf used in golf course, has fibers with chromogen which changes color in response to heat or stress due to impact of golf club head on fibers, protruding from substrate
Patent Assignee: SOSIN H B (SOSI-I); FEIL GOLF LLC (FEIL-N)
Inventor: **SOSIN H B**
Number of Countries: 097 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020091011	A1	20020711	US 2000250894	A	20001129	200264 B
			US 2001996461	A	20011128	
WO 200264221	A2	20020822	WO 2001US44604	A	20011129	200265

Priority Applications (No Type Date): US 2000250894 P 20001129; US 2001996461 A 20011128
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020091011	A1		10	A63B-069/36	Provisional application US 2000250894
WO 200264221	A2	E		A63B-069/00	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

Abstract (Basic): US 20020091011 A1
NOVELTY - The fibers (12) protruding from a substrate (10) has chromogen which is thermochromic, stress chromic or chemically chromic. The chromogen changes its **color** in response to change in environmental conditions such as heat and stress due to impact of a golf club head (14) on the fibers.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a **color** changing material.
USE - Used in golf course. Also used on dance floor, basket ball court, squash court and for marking safety areas in industrial setting.

ADVANTAGE - The detailed information about the divot is provided to the golfer as the feedback of the direction and location of impact is provided by the change in the **color** of the chromogen.

DESCRIPTION OF DRAWING(S) - The figure shows the behavior of the fibers when a ball placed on a mat is struck by the golf club head.

Substrate (10)

Fibers (12)

Golf club head (14)

pp; 10 DwgNo 2b/4

Derwent Class: P36

International Patent Class (Main): A63B-069/00; A63B-069/36

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File 392:Boston Herald 1995-2003/Sep 11
File 471:New York Times Fulltext 90-Day 2003/Sep 11
File 532:Bangor Daily News 1996-2003/Sep 12
File 631:Boston Globe 1980-2003/Sep 11
File 633:Phil.Inquirer 1983-2003/Sep 11
File 638:Newsday/New York Newsday 1987-2003/Sep 11
File 718:Pittsburgh Post-Gazette Jun 1990-2003/Sep 12
File 719:(Albany) The Times Union Mar 1986-2003/Sep 11
File 731:Philad.Dly.News 1983- 2003/Sep 11
File 733:The Buffalo News 1990- 2003/Sep 10
File 738:(Allentown) The Morning Call 1990-2003/Sep 11
File 743:(New Jersey)The Record 1989-2003/Sep 11
Set     Items   Description
S1          0   (HOWARD OR HOWIE)(2W)SOSIN AND TURF
S2          0   SOSIN AND TURF
S3          2   (HOWARD OR HOWIE)(2W)SOSIN [not relevant]
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File   9:Business & Industry(R) Jul/1994-2003/Sep 11
File 141:Readers Guide 1983-2003/Aug
File 481:DELPHES Eur Bus 95-2003/Sep W1
File 482:Newsweek 2000-2003/Aug 13
File 484:Periodical Abs Plustext 1986-2003/Sep W1
File 635:Business Dateline(R) 1985-2003/Sep 11
File 636:Gale Group Newsletter DB(TM) 1987-2003/Sep 11
File 646:Consumer Reports 1982-2003/Aug
File 609:Bridge World Markets 2000-2001/Oct 01
File 610:Business Wire 1999-2003/Sep 12
File 613:PR Newswire 1999-2003/Sep 12
File 810:Business Wire 1986-1999/Feb 28
File 813:PR Newswire 1987-1999/Apr 30
File  20:Dialog Global Reporter 1997-2003/Sep 12
Set     Items   Description
S1       2479   (ARTIFICIAL OR SYNTHETIC)(2W)(TURF OR GRASS OR GROUNDCOVER
            OR GROUND()COVER)
S2     170956   FLOOR()COVER???? OR CARPET??? OR RUG OR RUGS
S3        112   CHROMOGEN? ?
S4        625   CHROMOPHORE? ? OR PIGMENT()PRECURSOR? ?
S5     553663   FIBRE? ? OR FIBER? ?
S6     159825   STRAND? ? OR THREAD? ? OR FILAMENT? ?
S7      21364   (CHANG??? OR TURN???)(3W)(COLOR? ? OR COLOUR? ?)
S8          3   S1:S2 AND S3:S4
S9          3   RD (unique items) [1 too recent; 2 not relevant]
S10       131   S1:S2(S)S7
S11        52   S5:S6(3W)S7
S12         0   S10(S)S11
S13         0   S10 AND S11
S14        12   S11/2002:2003
S15        40   S11 NOT S14
S16        38   RD (unique items)
S17         2   S1:S2 AND S11

 17/3,AB,K/1     (Item 1 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2003 The Gale Group. All rts. reserv.
04182324    Supplier Number: 54722727
Magic at sea.
Lampert-Greaux, Ellen
Lighting Dimensions, pNA
May, 1999
Language:  English    Record Type:  Fulltext
Document Type: Magazine/Journal; Newsletter; Trade
Word Count:   1966
...     lighting by Rimmer. The restaurant is entirely black and white when
guests enter, from the carpet to the dishes, and in full living color by
the end of their meal. Magic...And guess what? Even the paint spots on the
palettes are lit with end-emitting fibers that also change color .
Then the waiters get into the act; as the lights dim they arrive carrying
small...
...area, the Oceaneer's Club has the look of Captain Hook's galleon with
blue carpet for the ocean and brown for the wooden decks. The columns
here look like piles...

 17/3,AB,K/2     (Item 1 from file: 20)
```

DIALOG(R)File 20:Dialog Global Reporter

15730901
Homes & Property: The Ones To Watch: Homes and Property
BARBARA CHANDLER
EVENING STANDARD, p26
March 21, 2001
JOURNAL CODE: FES LANGUAGE: English RECORD TYPE: FULLTEXT
WORD COUNT: 761

SNAKESKIN shutters, stained-glass curtain trimmings, washbasins all aglow with colourchanging fibre optics: London Design Week is your chance to marvel at the latest and the best that the decorating world can produce.

If you want ideas and choice for your new London home, you will find it here among a mass of fabrics, papers, paints, furniture, fittings and lighting for any situation.

... lined with modern lighting by Chad in unusual shapes and materials, while underfoot there are **rugs** by Limited Edition in leather, bamboo and even stinging nettles.

Wash your hands in a...

...tough resin to decorate a washbasin, bath or even a loo.

Other ideas glitter with **fibre** optics that constantly **change colour** . There are also chic little metal basins from Paris in a host of shapes (including...

... See them at silk specialists Chase Erwin (020 7795 0555), together with wool and leather **rugs** and the Natural History Museum lighting collection.

Sparse, elegant and uncluttered shapes reminiscent of the...

```
File 160:Gale Group PROMT(R) 1972-1989
File 148:Gale Group Trade & Industry DB 1976-2003/Sep 12
File  47:Gale Group Magazine DB(TM) 1959-2003/Sep 02
File  80:TGG Aerospace/Def.Mkts(R) 1986-2003/Sep 11
File 649:Gale Group Newswire ASAP(TM) 2003/Sep 10
File 621:Gale Group New Prod.Annou.(R) 1985-2003/Sep 12
Set     Items   Description
S1       1356   (ARTIFICIAL OR SYNTHETIC)(2W)(TURF OR GRASS OR GROUNDCOVER
            OR GROUND()COVER)
S2      93756   FLOOR()COVER???? OR CARPET??? OR RUG OR RUGS
S3         76   CHROMOGEN? ?
S4        594   CHROMOPHORE? ? OR PIGMENT()PRECURSOR? ?
S5     441106   FIBRE? ? OR FIBER? ?
S6      99820   STRAND? ? OR THREAD? ? OR FILAMENT? ?
S7      16079   (CHANG??? OR TURN???)(3W)(COLOR? ? OR COLOUR? ?)
S8       1088   PC=2279 OR PC=2272
S9      94858   S1:S2 OR S8
S10         7   S9 AND S3:S4
S11       542   S9 AND S7
S12         1   S10/2002:2003
S13         6   S10 NOT S12
S14         4   RD (unique items)
S15        86   S5:S6(5N)S7
S16         0   S15 AND SS8
S17         2   S1:S2(S)S15
S18         2   S17 NOT S10

 14/3,AB,K/1     (Item 1 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2003 The Gale Group. All rts. reserv.
07186720     SUPPLIER NUMBER: 15141498    (USE FORMAT 7 OR 9 FOR FULL TEXT)
Investigation of the long-term yellowing of architectural enamels as a
  function of coating composition. (Technical Focus: Resins)
Danneman, Jeffrey H.; Smith, Arthur C.
American Paint & Coatings Journal, v78, n31, p41(11)
Jan 17, 1994
ISSN: 0098-5430      LANGUAGE: ENGLISH      RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT:   3723    LINE COUNT:  00340
ABSTRACT:  The development of new high-solids resins was precipitated by an
EPA regulation imposing a VOC limit of 250 grams per liter for certain
architectural coatings. However, these new resins exhibited poor
characteristics such as poor brushability and tint acceptance as well as
excessive yellowing on interior surfaces during field tests. Results of a
study shows that careful resin design is essential for improving resistance
to long-term coloring.
...     a well-known phenomenon with several proposed mechanisms(2). The
generation of conjugated double bond chromophores associated with
oxidative dry is the generally accepted cause of long-term yellowing. The
formation of substituted pyrole chromophores as a result of the reaction
of oxidizing fatty acids with atmospheric ammonia is reported...test
exposed panels to ammonia fumes to accelerate the production of substituted
pyrole and other chromophores . For this test, the parts were coated on
the back side of a Leneta Form...known to react or interact with the
radicals(4,5) responsible for cure and subsequent chromophore production.
     Table 6
     Effect of Paint Composition on Yellowing with Resin B
```

(12-Month Storage...a significant problem in new-home construction, where many building products, including latex paint and **carpet** , are used around freshly applied oil-based trim paints. This problem is the basis... ... Y.I. decreases. **Significant color change occurs,** however, even with tertiary amines. Obviously **chromophores** other than pyroles are being formed...

18/7/1 (Item 1 from file: 160)
DIALOG(R)File 160:Gale Group PROMT(R)
(c) 1999 The Gale Group. All rts. reserv.
02063343
News from the carpet makers; Trendsetter
Textile World November, 1988 p. 35
ISSN: 0040-5213
Carriage Industries' Tower **Carpets** Div's Trendsetter **carpet** features the Dynagraphix II dyeing process, which produces ever-changing sculptured cut loop surface character with ever **changing color** tone. It is 100% continuous **filament** nylon protected with Teflon.

18/7/2 (Item 1 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2003 The Gale Group. All rts. reserv.
07107078 SUPPLIER NUMBER: 15126195
Martin Color-Fi recycles plastics into profits. (Martin Color-Fi Inc.)
Eisele, Stella M.
Journal of Commerce and Commercial, v400, n28198, p6B(1)
April 6, 1994

```
File   8:Ei Compendex(R) 1970-2003/Aug W5
File  65:Inside Conferences 1993-2003/Sep W1
File  67:World Textiles 1968-2003/Aug
File  94:JICST-EPlus 1985-2003/Sep W2
File  95:TEME-Technology & Management 1989-2003/Aug W4
File  99:Wilson Appl. Sci & Tech Abs 1983-2003/Aug
File 119:Textile Technol.Dig. 1978-2003/Jun
File 144:Pascal 1973-2003/Aug W5
File 248:PIRA 1975-2003/Sep W1
File 323:RAPRA Rubber & Plastics 1972-2003/Sep
File  35:Dissertation Abs Online 1861-2003/Aug
File 111:TGG Natl.Newspaper Index(SM) 1979-2003/Sep 10
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
File   6:NTIS 1964-2003/Sep W2
File  34:SciSearch(R) Cited Ref Sci 1990-2003/Sep W1
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
File 473:FINANCIAL TIMES ABSTRACTS 1998-2001/APR 02
File 474:New York Times Abs 1969-2003/Sep 11
File 475:Wall Street Journal Abs 1973-2003/Sep 11
Set     Items   Description
S1       1085   (ARTIFICIAL OR SYNTHETIC)(2W)(TURF OR GRASS OR GROUNDCOVER
            OR GROUND()COVER)
S2      56903   FLOOR()COVER???? OR CARPET??? OR RUG OR RUGS
S3       3623   CHROMOGEN? ?
S4      42521   CHROMOPHORE? ? OR PIGMENT()PRECURSOR? ?
S5    1342413   FIBRE? ? OR FIBER? ?
S6     308054   STRAND? ? OR THREAD? ? OR FILAMENT? ?
S7       9126   (CHANG??? OR TURN???)(3W)(COLOR? ? OR COLOUR? ?)
S8      57720   S1:S2
S9      45142   S3:S4
S10   1588430   S5:S6
S11         7   S8 AND S9
S12         6   RD (unique items)
S13         1   S12/2002:2003
S14         5   S12 NOT S13
S15        58   S8 AND S7
S16        14   S8(5N)S7
S17        13   RD (unique items)
S18         2   S17/2002 OR S17/2003
S19        10   S17 NOT (S11 OR S18)
S20        10   Sort S19/ALL/PY,D
S21        44   S15 NOT (S16 OR S11)
S22        39   RD (unique items)
S23         2   S22/2002 OR S22/2003
S24         2   S22/2001 [not relevant]
S25        35   S22 NOT S23:S24
S26        35   Sort S25/ALL/PY,D

 14/6/4     (Item 3 from file: 119)
0427518   07662/82
   MOISTURE INDICATOR.
   Patent Date: 19820504

 14/9/1     (Item 1 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
(c) 2003 Elsevier Eng.  Info. Inc. All rts. reserv.
```

03694099 E.I. No: EIP93081045383
Title: Chapter 11/part 2. Continuous nylon carpet **dyeing**
Author: Aspland, J.R.
Corporate Source: Clemson Univ, Clemson, SC, USA
Source: Textile Chemist and Colorist v 25 n 5 May 1993. p 35-39
Publication Year: 1993
CODEN: TCCOB6 ISSN: 0040-490X
Language: English
Document Type: JA; (Journal Article) Treatment: G; (General Review)
Journal Announcement: 9310W4
Abstract: Continuous dyeing of nylon **carpet** , stainblocker **carpet** finishing, the lightfastness requirements for automotive fabrics and lightfastness testing in general are discussed. The implications of stainblocking finishing processes are considered from the viewpoint of the dyehouse, cleaning technician and consumer. Colorfastness to ozone and the use of AQ reactive blue dyes are also introduced. The chemical structure of acid dye **chromophores** and the physical forms of acid dye products are discussed as well as a novel approach to the rapid batch dyeing of nylon. (Author abstract) 10 Refs.
Descriptors: **Carpet** manufacture; Textile processing; Dyeing; Synthetic fibers
Identifiers: Automotive fabrics; Light fastness; Syntans; **Carpet** finishing
Classification Codes:
819.5 (Textile Products & Processing); 819.3 (Fiber Chemistry & Processing); 819.2 (Synthetic Fibers)
819 (Textile & Fiber Technology)
81 (CHEMICAL PROCESS INDUSTRIES)

14/9/2 (Item 1 from file: 119)
DIALOG(R)File 119:Textile Technol.Dig.

0622261 01510/99
Chameleon Fibers: Dynamic Colors Change from Tunable Molecular and Oligomeric Devices.
Gregory R. V.; Samuels R. J.; Hanks T.
(Clemson Univ); (Georgia Inst of Technol - Atlanta) (Furman Univ - Greenville)
Annual Report - National Textile Center : 69+, 7 pages (Nov. 1998).
Publication Year: 1998
CODEN: ANTCES; ANTC
Language: English
7 refs.
The objectives of research on chameleon textiles was to develop color tunable fibers and fiber composite structures by the integration into or onto fibers of molecular or oligomeric organic chromophoric devices. These **devices are capable of color change over the visible portion of the electromagnetic spectrum by the application of a static or dynamic electric field. End products planned for this type of material include wall coverings and floor coverings that change color when low voltage electric fields are applied.** Preliminary research has begun the synthesis and characterization of unique monomeric and oligomeric molecules. To date, experiments have identified several promising molecules and optically characterized precursor materials.
Descriptors: APPLICATIONS; APPLYING; CHARACTER; COLOR; COMPOSITES; DIAGRAMS ; DYNAMIC CHARACTERISTICS; DYNAMICS; ELECTRICAL PROPERTIES;

ELECTRICITY ; ELECTROMAGNETIC DEVICES; EQUATIONS; EXPERIMENTATION; FIBERS ; **FLOOR COVERINGS** ; GRAPHS (CHARTS); IDENTIFICATION; MOLECULAR STRUCTURE ; MONOMERS; OBJECTIVES; OLIGOMERS; OPTICAL MEASUREMENT; OPTICAL PROPERTIES ; ORGANIC COMPOUNDS; PHYSICAL PROPERTIES; PLANNING; PRODUCTS; PROPERTIES ; RESEARCH; SPECTRA; STATICS; SYNTHESIS; WALL COVERINGS
Identifiers: COLOR- **chromophores** , color, dynamic characteristics, molecular structure, oligomers
Section Heading: A2 (Manmade fibers)

14/9/5 (Item 1 from file: 323)
DIALOG(R)File 323:RAPRA Rubber & Plastics
(c) 2003 RAPRA Technology Ltd. All rts. reserv.
00736233
TITLE: DEVELOPMENTS IN THE COLOURING OF POLYURETHANES
AUTHOR(S): Moody D; Ragsdale M
CORPORATE SOURCE: Milliken Chemical Co.
SOURCE: Macplas; 23, No.204, Dec.1998, p.101-3
ISSN: 0394-3453
JOURNAL ANNOUNCEMENT: 199909 RAPRA UPDATE: 199916
DOCUMENT TYPE: Journal Article
LANGUAGE: Italian
SUBFILE: (R) RAPRA
ABSTRACT: The colouring of PU foams for aesthetic purposes, for distinguishing between different grades and for masking yellowing is discussed. Problems associated with the use of water dispersed and predispersed pigments and colourants are examined, and developments in polymeric colourants and automatic colour compounding systems are reviewed.
SUBJECT HEADING (RAPRA): CELLULAR URETHANE POLYMERS, colouring, optical properties, colourants, pigments, automation; COLOURANTS, PU, cellular materials; AUTOMATION, colouring, PU, cellular materials; COLOURING, automation, PU, cellular materials; PIGMENTS, PU, cellular materials; OPTICAL PROPERTIES, colour, PU, cellular materials
TRADE NAMES: REACTINT
COMPANY NAME: DUNLOP FLEXIBLE FOAMS
IDENTIFIERS (Non-Polymer Terms): CARBON BLACK; ISOCYANATE; POLYOL
GEOGRAPHIC LOCATION: AUSTRALIA; USA
DESCRIPTORS: ABRASION; ADDED VALUE; ADDITIVE; AESTHETIC; AGGLOMERATE; APPEARANCE; APPLICATION; AQUEOUS DISPERSION; ARCHERY; AROMATIC; AUTOMATION; AUTOMOTIVE APPLICATION; BALL; BALLS; BOWLING BALL; BUMPER; CAR; **CARPET** ; **CARPET BACKING** ; CELLULAR MATERIAL; **CHROMOGEN** ; **CHROMOPHORE** ; COLOR; COLOR CODING; COLOR COMPOUNDING; COLOR SELECTION; COLORANT; COLORING; COLOUR; COLOUR CODING; COLOUR COMPOUNDING; COLOUR CONCEALING; COLOUR SELECTION; COLOURANT; COLOURING; COMPANIES; COMPANY; COMPOUNDING; COMPUTER CONTROL; CONTROL SYSTEM; CUSHION; DASHBOARD; DATA ; DENSITY; DISCOLORATION; DISCOLOURATION; DISPERSION; ELASTOMER; ELECTRONIC APPLICATION; EXTRACTION; FLAMMABILITY; FLEXIBILITY; FLEXIBLE ; FOAM; FOAMING; FOOD PACKAGING; FRUIT PACKAGING; HIGH DENSITY; HOSPITAL; HOUSEWARE; HOUSEWARES; HYDROXY GROUP; HYDROXYL GROUP; INORGANIC PIGMENT; INSTRUMENT PANEL; LIQUID ADDITIVE; LOW DENSITY; MACHINE; MACHINERY; MATTRESS; MECHANICAL PROPERTIES; MEDICAL APPLICATION; MICROVOID; MISCIBILITY; MIXING; NUCLEATION; OPACITY; OPTICAL PROPERTIES; ORGANIC PIGMENT; PACKAGING; PIGMENT; PLASTIC; PLASTICISER; PLASTICIZER; POLYMERIC COLORANT; POLYMERIC COLOURANT;

POLYMERIC PIGMENT; POLYURETHANE; PREDISPERSED; PROPERTIES; PU; REACTION INJECTION MOLDING; REACTION INJECTION MOULDING; REACTION MOULDING; REACTIVITY; RHEOLOGICAL PROPERTIES; RHEOLOGY; RUBBER; SEDIMENTATION; SELF-EXTINGUISHING; SOLUBILITY; SOLVENT EXTRACTION; SPONGE; SPORTS EQUIPMENT; SPORTS GOODS; STEERING WHEEL; SURFACE ACTIVE AGENT; SURFACTANT; TECHNICAL; THERAPEUTIC APPLICATION; THERMOPLASTIC; THERMOSET; TOYS; TRADE NAME; UPHOLSTERY; VEGETABLE PACKAGING; VISCOSITY ; VOID; VOID FORMATION; WATER DISPERSAL; YELLOWING
RAPRA CLASSIFICATION CODE: 1121; 43C6; 52P; 6124; 813; 99211
CATEGORY CODES: OC; CC; KT; MC; SB; UJ

20/6/9 (Item 9 from file: 8)
01976967
Title: INSTRUMENTAL OBJECTIVITY.
Publication Year: 1986

26/6/15 (Item 15 from file: 119)
0576939 04569/94
Evaluation of Carpet **Surfaces by Means of Image Analysis.**

26/6/21 (Item 21 from file: 67)
00188570 WORLD TEXTILE NO: 1930750 SUBFILE: UMIST Library
A further study of the colour assessment of new and worn carpets
1992, (25 pages)., 1992

26/6/22 (Item 22 from file: 119)
0532402 07570/89
SUPPLIERS TO AMERICAN AUTO MAKERS EXPECT TO SEE CHANGES **IN** COLOR , **FIBER, AND STYLING.**

26/6/23 (Item 23 from file: 119)
0529419 04644/89
EVALUATION OF THE USE OF TEXAS WOOL AND MOHAIR IN BLENDS WITH OTHER FIBERS TO PRODUCE FLAME RESISTANT FABRICS.

26/6/29 (Item 29 from file: 67)
00145793 WORLD TEXTILE NO: 8702768 SUBFILE: BTTG (Shirley Institute)
Fleissner: late developments in continuous carpet **dyeing, printing**
Textile World, 1987, 137, No.4, April, 81-84 (3 pages)., 1987

26/6/32 (Item 32 from file: 119)
0425353 05777/82
1983 COLOR FORECAST. REASONABLY MILD.

26/6/34 (Item 34 from file: 119)
0340836 00836/78
SOCKS, BUT WHICH ONES?

26/6/35 (Item 35 from file: 119)
0510549 08123/87
TESTING OF TEXTILES -- ASSESSMENT OF CHANGE IN APPEARANCE OF TEXTILE FLOORCOVERINGS BY THE SUBJECTIVE VISUAL METHOD.
PRUEFUNG VON TEXTILIEN -- BEURTEILUNG DER AUSSENHENSVERAENDERUNG TEXTILER FUSSBODENBELAEGE -- SUBJEKTIV-VISUELLES VERFAHREN.

26/7/1 (Item 1 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management

01464740 20001101686
Innovative process in BCF yarn production
(Ein innovativer Prozess fuer die BCF-Garnproduktion)
Klambauer, G
SML, Lenzing, A
World Congress, Polypropylene in Textiles, Univ. of Huddersfield, GB, 5-6 Jul, 20002000
Document type: Conference paper Language: English
Record type: Abstract
ABSTRACT:
Company SML located in Lenzing/Austria enlarges the production program for the benefit of **carpet** industry. SML has specialised for more than 30 years in the development and manufacture of extrusion technology and offers the following product range: Austrofil Multifilament Spinning Lines for FIDY, BCF, POY, Coextrusion Coating and Laminating Lines, Coextrusion Castfilm Lines, Monoaxial Stretching and Thermolaminating Lines, Breathable Film Lines, Coextrusion Calendering Lines for Film and Sheet, High-speed Film Winders, and Automatic Screen Belt Filters. The use of polypropylene has progressed rapidly since its introduction. Coloured olefin fibres are produced by adding masterbatch directly to the polymer during melt spinning. For the application in **carpets** , properties such as low density, high covering power, resistance to deterioration, stain and soil resistance, low static charge, easy clean, etc. are of special importance. Austrofil BCF offers a flexible production, fast **change** of **colour** , and is of compact design. The texturing system guarantees a very high and uniform crimp contraction. Also the thermal shrinkage is low and uniform. The count range lies between 1100 and 3000 dtex. Process speeds are up to 3000 m/min. the drawing and texturing unit stretches the yarn at a ratio common for BCF - total drawing ratio of roughly 1:2.5. All SML lines consist of self-produced parts and top quality components only. Extrusion coating lines for **carpets** in their well proved modular design can be supplied either fully equipped, i. e. with run-in and run-out device or for integration in existing powder coating lines with a coating unit including stabilisation bar and extrusion unit only.

26/7/2 (Item 2 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management

01395823 20000104760
Innovative processes in BCF yarn production and extrusion coating
(Innovative Prozesse in der BCF-Garnherstellung and beim Extrusionsbeschichten)
Klambauer, G
SML Maschinen, A
International Carpet Yearbook, v18, n2000, pp30,32, 2000
Document type: journal article Language: English
Record type: Abstract
ISSN: 0040-5116
ABSTRACT:
SML has started to design and produce compact synthetic fibre spinning lines, covering processes for the production of FDY, POY and BCF yarns. The Austrofil BCF line for **carpet** yarns presented to an expert audience at ITMA '99 was developed in accordance with the international trend of

increasing PP's market share in textile and **carpet** applications. Austrofil BCF offers following advantages to producers: flexible production of different yarn specifications, fast **change** of **colour** , compact design with horizontal positioning of stretching and texturing modules, a low heigth of 6,2 m, garantee of a very high and uniform crimp contraction, easy handling and low maintenance, nozzle with plain surfaces, ceramic surfaces and an exellent yarn quality with a minimum of thermal shrinkage. The standard BCF multifilament spinning line consists of four modules with two threads each. For a sufficient melt quality a 90/28D barrier screw with an output capacity of up to 220kg/h is used in the extrusion unit. After extrusion the melt is pressed through a filter. With a steady and sufficient pressure flows the melt through the electrically-heated spinning beam to the spinnerets. The filaments (trilobal or delta, yarn titre from 1100 to 3000 dtex) are cooled by air in 3 horizontal zones. The drawing and texturing unit stretches the yarn at a ratio of roughly 1:2,5 (3000m/min, controlled air streams). In the texturing channel is a temperature of 140 to 150 degree C (7 to 8 bar). The long contact with the cooling drum ensures highest cooling efficiency. Finally, the yarn is led through an intermingling box and wound up on a bobbin. In the SML lab there are several machines for demonstration and test purposes. The R & D department works closely with customers and sub-suppliers. In combination with SML Extrusion coating lines, **carpets** of 100% PP can be made.

26/7/4 (Item 4 from file: 323)
DIALOG(R)File 323:RAPRA Rubber & Plastics

00800391
TITLE: FLOOR COVERINGS
AUTHOR(S): Harwood I C; Wilson G J; Jones K M; Gansser-Potts M D
CORPORATE SOURCE: Amtico Co.Ltd.
PATENT NUMBER: US 6103044 A1
PATENT DATE: 20000815
PATENT COUNTRY/KIND CODE: US A1
APPLICATION NUMBER: US 12442 (US 12442-1998)
APPLICATION DATE: 19980123
PRIORITY NUMBER: GB 9523780
PRIORITY DATE: 19951121
JOURNAL ANNOUNCEMENT: 200103 RAPRA UPDATE: 200105
DOCUMENT TYPE: Patent
LANGUAGE: English
SUBFILE: (R) RAPRA
ABSTRACT: A backing film for incorporation as a backing layer in a resilient **floor covering** or a floor tile having at least two laminae and a method for making such a backing layer whereby wastage is reduced when the **colour** of the upper lamina is changed. Where there are two backing films having two or three laminae making up the backing layer the intermediately coloured film resulting from a **change** in the **colour** of the upper lamina can be utilised without further processing on the second backing film where **colour** is not essential. Where there are three laminae making up a backing film the desired **colour** is introduced and established in the bottom lamina before the supply of the original **colour** to the upper lamina is stopped. The film can then be turned over for use with the former bottom lamina becoming the upper lamina.

26/7/5 (Item 5 from file: 119)

DIALOG(R)File 119:Textile Technol.Dig.

0639341 200008990

Special Fibres for the Millennium.

Vijay K.; Balasubramanian M.
Textile Magazine (Madras) 41, No. 10: 25+, 6 pages (Aug. 2000).
Publication Year: 2000
CODEN: TEMADU; TEMI
Language: English

Chameleon fibers change color , hue, depth of shade, or optical transparency in the presence of an electrical or magnetic field. Markets for such fibers--which incorporate molecules and oligomers that change their absorption or reflection of electromagnetic radiation in the infrared, visible, and ultraviolet spectra--include **floor coverings** , wall covering, billboards, biosensors, detectors, and military and consumer apparel. Photoadaptive fibers undergo illumination induced reversible optical and heat reflectivity changes. Derivation from polymeric films involves crosslinking polyvinyl alcohol with dimethylsulfoxide in the presence of polyacrylic acid. Intelligent fibers manufactured from stimuli sensitive oligomers respond to changes in pH, temperature, and electrolytes. They include thermal responsive hygrogels, amphophilic polymers, and shape memory polymers.

26/7/9 (Item 9 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

06080202 Genuine Article#: XT925 Number of References: 9
Title: Prediction and verification of an iridescent synthetic fiber
Author(s): Rubin B (REPRINT) ; Kobsa H; Shearer SM
Corporate Source: DUPONT CO INC,CENT SCI & ENGN/WILMINGTON//DE/19880 (REPRINT)
Journal: APPLIED OPTICS, 1997, V36, N25 (SEP 1), P6388-6392
ISSN: 0003-6935 Publication date: 19970901
Publisher: OPTICAL SOC AMER, 2010 MASSACHUSETTS AVE NW, WASHINGTON, DC 20036
Language: English Document Type: ARTICLE
Abstract: An optical model that predicts the reflection of light by a synthetic fiber of arbitrary cross-sectional shape is described. The model uses a Monte Carlo simulation of an exact ray trace of light for incident rays directed at a selected angle to the fiber axis. The model revealed an optical effect in round fibers that led to the prediction of a new mechanism for iridescence (**change** -of **color** with angle of illumination or view) in a fabric by means of round, concentric, sheath-core fibers, with core size less than or equal to 40% by volume and with the sheath and core dyed different colors. The prediction has been verified in actual fabrics. (C) 1997 Optical Society of America.

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File 350:Derwent WPIX 1963-2003/UD,UM &UP=200358
File 347:JAPIO Oct 1976-2003/May(Updated 030902)
File 371:French Patents 1961-2002/BOPI 200209
Set     Items   Description
S1       1575   (ARTIFICIAL OR SYNTHETIC)(2W)(TURF OR GRASS OR GROUNDCOVER
            OR GROUND()COVER)
S2      28231   FLOOR()COVER???? OR CARPET??? OR RUG OR RUGS
S3       1744   CHROMOGEN? ?
S4       2443   CHROMOPHORE? ? OR PIGMENT()PRECURSOR? ?
S5     878888   FIBRE? ? OR FIBER? ?
S6     282126   STRAND? ? OR THREAD? ? OR FILAMENT? ?
S7      16718   (CHANG??? OR TURN???)(3W)(COLOR? ? OR COLOUR? ?)
S8      15344   IC=A63B-069
S9          9   S1:S2 AND S3:S4
S10         1   S1 AND S7
S11         0   S10 NOT S9
S12        42   S2 AND S7
S13       525   S5:S6(S)S7
S14         7   S12 AND S13
S15         0   S12 AND S8
S16         6   S14 NOT S9
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9/26,TI/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
009142712
WPI Acc No: 1992-270150/199233
Azo dimer and trimer fugitive tints - used with heat setting treatments, lighter shades of prod. and at increased tint-levels, resisting penetration into non-crystalline regions

9/26,TI/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
009074483
WPI Acc No: 1992-201902/199225
Cross-staining of nylon cationic fibres with acid dyes is prevented - by using aq. vinyl sulphone dyes with 3 or more sulphonic acid and fibre reactive substits. at pH 2-4 for the anionic-dyeable fibres

9/26,TI/9 (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
000857905
WPI Acc No: 1972-17867T/197211
Shampoo inhibiting stain absorption - for textiles esp carpets

9/7,K/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
008705720
WPI Acc No: 1991-209741/199129
New polyoxyalkylated nucleophile derivs. - with glycidol residues in polyoxyalkylene chain esp. useful for prodn. of coloured polymers
Patent Assignee: MILLIKEN RES CORP (DEER)
Inventor: KLUGER E W; MOODY D J; REKERS J W

Number of Countries: 016 Number of Patents: 007
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 437105	A	19910717	EP 90314335	A	19901228	199129	B
US 5082938	A	19920121	US 90486992	A	19900301	199206	
JP 5097994	A	19930420	JP 91196178	A	19910108	199320	
US 5290921	A	19940301	US 90461852	A	19900108	199409	
EP 437105	B1	19961113	EP 90314335	A	19901228	199650	
DE 69029128	E	19961219	DE 629128	A	19901228	199705	
			EP 90314335	A	19901228		
JP 3160317	B2	20010425	JP 91196178	A	19910108	200126	

Priority Applications (No Type Date): US 90486992 A 19900301; US 90461852 A 19900108
Cited Patents: CH 557860; EP 72621; US 3446757; US 4086151; US 4284729; US 4751254
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 437105	A				
Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE					
JP 5097994	A		125	C08G-065/26	
US 5290921	A		83	C09B-029/033	
EP 437105	B1	E	138	C09B-069/10	
Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LI LU NL SE					
DE 69029128	E			C09B-069/10	Based on patent EP 437105
JP 3160317	B2		122	C08G-065/26	Previous Publ. patent JP 5097994

Abstract (Basic): EP 437105 A

Cpds. of formula Y(Z)n (I) are new: Y is the residue of an organic nucleophile; n = 1-6; each Z is a polyoxyalkylene gp. defined as follows: (a) it contains at least one glycidol residue segment contg. at least one glycidol residue; (b) at least one of the primary oxy sites of the glycidol segment is linked directly to a first epoxide segment contg. at least one residue of a C3+ epoxide; (c) in the first epoxide segment, the C3+ epoxide residue is either linked directly to the primary oxy site of the glycidol segment or is within 10 epoxide residues of this site; (d) the first epoxide segment is linked through a secondary oxy site directly to a second epoxide segment contg. at least one epoxide residue with a terminal prim. OH gp.; and (e) at least one secondary oxy site in the glycidol residue segment is linked directly to a third epoxide segment with a terminal primary OH gp.

USE - (I) where Y is a **chromophore** are useful as colorants, esp. for reaction with isocyanates to produce coloured polyurethanes, e.g. in the mfr. of **carpet** underlay glues or shoe soles. They may also be used to colour other thermosetting or thermoplastic resins, e.g. polyolefins. (138pp Dwg.No.0/0)

Abstract (Equivalent): EP 437105 B

A process for preparing a compound having the formula Y-(Z)1-6 wherein Y is the residue of an organic nucleophile; each group Z is a poly(oxyalkylene) moiety comprising at least one glycidol segment comprising at least one glycidol residue, said process comprising the steps of: 1. providing a reaction system containing an initial reactant having at least one glycidol segment comprised of at least one glycidol residue of formula -CH2CH(OH)CH2O- or -CH2CH(OH)CH2OH said glycidol segment containing at least one primary hydroxyl group and at least one secondary hydroxyl group; 2. contacting said reaction system with a first epoxide reactant material comprised of a secondary hydroxyl producing epoxide having three or more carbon atoms; 3. contacting said

reaction system with a second epoxide reactant material comprised of a primary hydroxyl producing epoxide, t addition of said epoxide reactant materials being in a selective sequence firstly to produce a secondary hydroxyl containing epoxide residue segment linked directly to at least one primary oxy site on said glycidol segment and secondly to terminate at least a major portion of the resulting poly(oxyalkylene) chains or branches with primary hydroxyl groups.

(Dwg.0/0)

Abstract (Equivalent): US 5082938 A

The cpd. is of formula Y-(Z) 1-6 (I) (where Y = aniline 1,2,3,4-tetrahydroquinolines, 3,4-dihydro-2H-1,4-benzoxazine, 2-aminothiazole, indole, 2,3-dihydroindole, carbazole, naphthylamine, phenoxazine, phenothiazine, diphenylamine, julolidine, 2-amino thiophene and aminopyridine; and each Z = poly(oxyalkylene)) having glycidal segment(s) and prim. oxy site of segment is linked to an epoxide segment of at least 3C. Epoxide residue is linked to glycidol segment at prim. oxy site or is within 16 epoxy residues of site. Segment is linked through sec. oxy site to second epoxide segment contg. epoxide(s) having prim. terminal OH. Sec. OH of glycidol segment is linked to 3rd epoxide segment having prim. terminal OH. Z has mol.wt. 200-10000.

USE/ADVANTAGE - Improves reactivity and compatibility of polymeric substrates. (40pp)

US 5290921 A

Prim. alcohol hydroxyl enhanced colourant of formula C-(Z)1-4 is new, where C is an azo **chromogen** and Z is a polyoxyalkylene gp. of at least 2 moles of glycidol reacted with an amino gp. of the **chromogen** , the residue of at least 1 mol of a sec. OH forming alkylene oxide comprising propylene oxide or butylene oxide reacted with each prim. OH site of the glycidol gp. and at least 1 mol of ethylene oxide reacted with each sec. OH site on the glycidol gps. and the sec. OH forming alkylene oxide, provided that the total number of gps. of the sec. OH forming alkylene oxides and ethylene oxide is upto 200, pref. up to 42. Pref. the glycidol gps. comprise 5-50 mole % of the total glycidol gps; sec. OH forming alkylene oxide gps. and ethylene oxide gps.

USE/ADVANTAGE - The colourant has improved reactivity in e.g. polyurethane foams for imparting permanent colouring.

Dwg.0/0

Derwent Class: A25; A60; A83; E24; F07; G03
International Patent Class (Main): C08G-065/26; C09B-029/033; C09B-069/10
International Patent Class (Additional): C07C-211/46; C07C-217/28; C07D-303/18; C07D-303/36; C07D-405/12; C07D-405/14; C07D-409/12; C07D-413/14; C07D-417/12; C07D-417/14; C07D-455/04; C08G-018/48; C08G-065/28; C08G-065/321; C08L-071/02; C09B-023/00; C09B-029/085; C09B-029/09; C09B-029/36; C09B-029/44; C09B-031/043; C09B-044/10; C09B-044/12; C09B-044/14; C09B-044/18; C09B-044/20; C09B-057/00; D06P-003/24

9/7,K/7 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
007160174
WPI Acc No: 1987-157183/198722

POlyurethane foams contg. microencapsulated thermochromic compsn. - that comprises electron-donating chromogenic cpd., acidic cpd. and solvent

Patent Assignee: BRIDGESTONE CORP (BRID); MATSUI SHIKISO KAGAKU KOGYOSHO

(MATC)
Inventor: HASEGAWA H; HAYASHI Y; KOGA T; OKUYAMA T; SHIMIZU G; TAKEI A; TORIGOE H
Number of Countries: 014 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 4666949	A	19870519	US 86825076	A	19860131	198722	B
EP 231030	A	19870805	EP 87101237	A	19870129	198731	

Priority Applications (No Type Date): US 86825076 A 19860131
Cited Patents: 3.Jnl.Ref; A3...8835; JP 57076072; JP 60173028; JP 62015236; No-SR.Pub
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4666949	A		6		
EP 231030	A	E			

Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE
Abstract (Basic): US 4666949 A

A **thermochromatic polyurethane foam** comprises a polyol and a polyisocyanate as main components and a thermochromic compsn. (I) that acts as a colouring agent added alone or with a usual dye or pigment. (I) is microencapsulated and comprises (a) an electron-donating chromogenic material, (b) an acidic substance and (c) a solvent.

(a) is used in an amt. of 1-50 pts. by wt./100 pts. by wt. of polyol; (b) is a 1,2,3-triazole; and (c) is an alcohol, ester, azomethines or amide having a b.pt. of at least 150 deg.C.

USE/ADVANTAGE - **The foams retain the desired properties of polyurethane foams and are able to reversibly change colour. They are used for the mfr. of** toys that change colour with atmos. temp., ornaments that change colour in different seasons, cleaners for kitchens and baths, temp. sensors for living quarters, filters for detecting abnormal temp. of penetrating liqs. or gases, soundproofing and insulating materials, hydroponic materials for detecting water temps. and **cores for heater-incorporating carpets** .

0/0
Derwent Class: A25; E13; G04
International Patent Class (Additional): C08G-018/14; C08K-005/00

9/7,K/8 (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
003178428
WPI Acc No: 1981-38979D/198122
Dyeing of textiles made of cellulose fibres - using reactive azo or anthraquinone dyes with cyanamide or dicyanamide opt alkyl substd.
Patent Assignee: TOYOBO KK (TOYM)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 56037380	A	19810411				198122	B

Priority Applications (No Type Date): JP 79110604 A 19790829
Abstract (Basic): JP 56037380 A

(a) At least one reactive dye of formula (I) and (b) at least one amine cpd. selected from among cyanamide, dicyandiamide and alkyl substd. derivs. thereof, are applied to textile goods made of cellulose fibre, followed by heat treatment, where D is dye matrix with azo or anthraquinone **chromophore** ; X is -(CH2)n-; Y is -CO-, -SO2- or -; Z is

-CH2Cl, -CH=CH2, -CH2CH2Cl, -C(Cl)=CH2, -C(Br)=CH2, -C(F)=CH2 or gp. (II); n is 0 or 1-2; R is H or 1-6C alkyl gp.

Cellulosic textile goods include yarns, woven, knitted and nonwoven fabrics, **carpet** , etc. made of cotton, viscose rayon, polynosic, cuproammonium rayon, linen, regenerated cellulose fibre and their blends with polyester, polyamide, polyacrylonitrile, wool, silk, etc.

Cellulosic textile goods are dyed uniformly in clear and fast colour in acidic or weakly alkaline condition

Derwent Class: A18; A23; A60; E24; F06
International Patent Class (Additional): D06P-003/66

16/7,K/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
015160749
WPI Acc No: 2003-221277/200321

Polyamide-based material used for production of fibres, film and moulded products, comprises nano-scale titanium dioxide particles

Patent Assignee: BASF AG (BADI)
Inventor: KLOSTERMANN R; NEUBERG R; RICHTER K; WEISS R; WILMS A
Number of Countries: 100 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200294921	A1	20021128	WO 2002EP5475	A	20020517	200321	B
DE 10125137	A1	20021205	DE 1025137	A	20010522	200321	

Priority Applications (No Type Date): DE 1025137 A 20010522
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200294921	A1	G	24	C08K-003/22	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

DE 10125137	A1			C08L-077/02	

Abstract (Basic): WO 200294921 A1

NOVELTY - Polymer material (I) based on (a) a polymer (II) with repeating amide groups in the main chain also comprises (b) 0.01-5 wt% titanium dioxide (III) with an average particle size (d50) of up to 150 nm.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for fibres, sheet material and moulded products containing the polymer material (I).

USE - For the production of filaments, fibres, film, sheet material and moulded products, especially e.g. polyamide 6 filaments for production of textiles or **carpet** material.

ADVANTAGE - Polyamide-based material which enables the production of fibres, film and moulded products with improved thermal stability as shown by smaller reductions in amino end-group content, viscosity, depth of color and uniformity of color.

pp; 24 DwgNo 0/0

Derwent Class: A23; E32; F01
International Patent Class (Main): C08K-003/22; C08L-077/02

International Patent Class (Additional): C08G-069/46; C08G-069/48; C08J-005/02; C08K-007/18; C08L-077/00; D01F-006/60
Extension Abstract:
... for 1.5 hours at 275degreesC and 18 bar to give polyamide 66 (product Ib). **Fibres** spun from (Ib) were heat-set for 2 minutes at 120degreesC, resulting in a change...
...group content (AEG) and +1 (-14) % in relative viscosity (RV). Knitted fabric made from these **fibres** was heat-set as above and then dyed with a mixture of Intrazone Red G...
...special titanium dioxide (above) was replaced by 0.3 wt% standard titanium dioxide. The relative **change** in depth of **color** (D) was 8% (i.e. D for Ib after heat-setting/D for V1 after...

16/7,K/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010639780
WPI Acc No: 1996-136733/199614
Thermal colour changeable nonwoven fabric for high durability - prepd. by blending crimped short heat melting fibre and crimped short non-melting polyester fibre, useful for carpets and covering material
Patent Assignee: PILOT INK CO LTD (PILO)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 8027653	A	19960130	JP 94180939	A	19940708	199614	B

Priority Applications (No Type Date): JP 94180939 A 19940708
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 8027653	A		4	D04H-001/42	

Abstract (Basic): JP 8027653 A
A thermal colour changeable nonwoven fabric is prepd. by blending:
(a) 5-40 pts. wt. crimped short fibre of heat melting fibre, and
(b) 60-95 pts. wt. crimped short fibre which is not melted at the m.pt. of the fibre (a).
The **fibre** (b) is fixed by heat melting of the **fibre** (a), and **also at least 10 wt.% of the fibre (b) changes colour on change of temp.**
USE - The nonwoven fabric is useful for **carpet** , table cloth, **rug** , interior articles, case of heating or cooling articles, bag and covering material.
ADVANTAGE - The fabric is produced by using a heat melting fibre such as low m.pt. polyester as a binder. Also a thermal colour changeable fibre is blended in a body in this step, so that productivity and durability as a sheet material can be satisfied. It is suitable as a thermal colour changeable base material, and it is possible to print non-thermal colour changeable image or thermal colour changeable image.
Dwg.0/0
Derwent Class: A94; F04
International Patent Class (Main): D04H-001/42
International Patent Class (Additional): C09K-009/02; D01F-001/10; D01F-006/90; D04H-001/54; D06M-023/12

16/7,K/4 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO

05304777 **Image available**
MULTICOLOR PATTERNED BULKY YARN AND MULTICOLOR PATTERNED CARPET USING THE SAME BULKY YARN
PUB. NO.: 08-260277 [JP 8260277 A]
PUBLISHED: October 08, 1996 (19961008)
INVENTOR(s): INOUE SHOZO
HONDA HIROMI
SUZUKI KIYOICHI
APPLICANT(s): TORAY IND INC [000315] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 07-063739 [JP 9563739]
FILED: March 23, 1995 (19950323)

ABSTRACT

PURPOSE: To obtain a multicolor patterned bulky yarn having varicolored color tones better in balance among colors than a conventional interlaced multicolor bulky yarn and a multicolor patterned **carpet** good in balance among the color tones using the multicolor bulky yarn.
CONSTITUTION: This multicolor patterned bulky yarn has single interlaced parts 6 and 7 only in a part of synthetic **fiber** multifilament bundles and wholly interlaced parts 1, 2...5 in the whole of the multicolor patterned bulky yarn comprising the synthetic **fiber** multifilament bundles, in the multicolor patterned bulky yarn comprising the plural kinds of the synthetic **fiber** multifilament bundles different in colors. Furthermore, **the multicolor patterned carpet , having a continuously changed color pattern** and capable of manifesting the calm pattern with slight skitteriness in good balance is obtained by tufting a pile fabric with the multicolor patterned bulky yarn and further forming a backing resin layer.

16/7,K/5 (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO

04264764 **Image available**
HOT CARPET AND HOT CARPET COVER
PUB. NO.: 05-256464 [JP 5256464 A]
PUBLISHED: October 05, 1993 (19931005)
INVENTOR(s): HIRAMATSU KENJI
CHIGA KUNIYUKI
APPLICANT(s): KURARAY CO LTD [000108] (A Japanese Company or Corporation), JP (Japan)
PILOT INK CO LTD [403379] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 04-087540 [JP 9287540]
FILED: March 12, 1992 (19920312)

ABSTRACT

PURPOSE: To make it possible to judge whether or not a hot **carpet** is electrically energized by eye by **employing complex fibers containing material which is reversibly, thermally discolored as a part of fibers constituting the surface layer of the hot carpet .**
CONSTITUTION: **Part of the surface layer of a hot carpet 1 is comprised of synthetic fibers containing material which is reversibly, thermally discolored and, as the synthetic fibers** , complex **fibers** comprising thermoplastic polymers containing microcapsuled materials which are reversibly, thermally discolored are used. In the case that, for example, the **carpet** 1 has no changeover of electric heating region, characters 2 or patterns 3 are formed on a part of or the whole of the **carpet** 1 using

the complex **fibers** containing the material so that electric heating can be displayed by the reversible **change** of **color** tone of the characters 2 or patterns 3. As a result, whether or not there is electric power supply can be clearly judged usually.

16/7,K/6 (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO

04154650 **Image available**
CUT PILE TUFTED **CARPET**
PUB. NO.: 05-146350 [JP 5146350 A]
PUBLISHED: June 15, 1993 (19930615)
INVENTOR(s): FUJIWARA TAKASHI
APPLICANT(s): NEGI SANGYO KK [486547] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 03-299808 [JP 91299808]
FILED: October 19, 1991 (19911019)

ABSTRACT

PURPOSE: To provide a pepper-and-salt pattern having a fine color tone on a cut pile surface by tufting pile yarn having two kinds of falsely twisted spinning slivers in different colors doubled and twisted on a foundation.
CONSTITUTION: A tufted **carpet** 15 has cut pile 14 formed by tufting pile yarn 12 made by doubling and twisting a thermoplastic synthetic **fiber** spinning silver 11A formed by false twist through a pneumatic false twisting device and a thermoplastic synthetic **fiber** spinning silver 11B having a color or dyeing affinity different from that of the spinning sliver 11A and formed by false twist through the pneumatic false twisting device on a foundation 13. Most of staple **fibers** constituting the spinning silver are arranged in parallel in the longitudinal direction of these spinning silvers 11A, 11B. Also, the longitudinal direction N of these staple **fibers** is arranged parallel to the twisted direction M of the spinning slivers 11A, 11B formed by doubling and twisting. Thus, pepper-and-salt patterns composed of sectional surfaces 23A, 23B of the spinning slivers 11A, 11B have the depth of gradually **changing** **color** between different colored spots.

```
File 348:EUROPEAN PATENTS 1978-2003/Aug W05
File 349:PCT FULLTEXT 1979-2002/UB=20030904,UT=20030828
Set     Items   Description
S1        436   (ARTIFICIAL OR SYNTHETIC)(2W)(TURF OR GRASS OR GROUNDCOVER
            OR GROUND()COVER)
S2      10572   FLOOR()COVER???? OR CARPET??? OR RUG OR RUGS
S3       4422   CHROMOGEN? ?
S4       8423   CHROMOPHORE? ? OR PIGMENT()PRECURSOR? ?
S5     221338   FIBRE? ? OR FIBER? ?
S6     162296   STRAND? ? OR THREAD? ? OR FILAMENT? ?
S7      19329   (CHANG??? OR TURN???)(3W)(COLOR? ? OR COLOUR? ?)
S8       1812   IC=A63B-069
S9          4   S1:S2(S)S3:S4
S10         1   S3:S4 AND S8
S11         0   S10 NOT S9
S12         1   S1(S)S7
S13         0   S12 NOT S10
S14        47   S2(S)S7
S15       138   S5:S6(5N)S7
S16         1   S14(S)S15
S17         1   S16 NOT S10 [not relevant]
S18         1   S3:S4 AND S8
S19         0   S18 NOT S10

9/3,AB,K/3     (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00276168
LOW  COLOR  PROCESSING,  HEAT AND LIGHT STABILIZER SYSTEM FOR POLYPROPYLENE
    FIBER
SYSTEME STABILISATEUR PAR RAPPORT A LA LUMIERE ET A LA CHALEUR, ET A FAIBLE
    NIVEAU DE COLORATION, DESTINE AUX FIBRES DE POLYPROPYLENE
Patent Applicant/Assignee:
  CIBA-GEIGY AG,
  HORSEY Douglas W,
  KING Roswell E III,
Inventor(s):
  HORSEY Douglas W,
  KING Roswell E III,
Patent and Priority Information (Country, Number, Date):
  Patent:               WO 9424344 A1 19941027
  Application:          WO 94IB56 19940406  (PCT/WO IB9400056)
  Priority Application: US 9348086 19930415
Designated States: AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB GE HU JP KG
  KP KR KZ LK LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA
  US UZ VN
Publication Language: English
Fulltext Word Count: 7657
English Abstract
   Blends of long chain N,N-dialkylhydroxylamines, selected phosphites and
  selected hindered amines are surprisingly effective in providing
  processing, long term heat aging and light stability performance and
  especially gas fade resistance to polypropylene fibers in the absence of
  a traditionally used phenolic antioxidant.
Fulltext Availability:  Detailed Description
Detailed Description
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... optimized.
Polypropylene is used extensively for the manufacture of fiber for residential, commercial and automotive **carpeting** . White and light-colored fiber can suffer from discoloration due to gas fade discoloration. Polypropylene...
...well-known as a potential source of such discoloration by the formation of quinone type **chromophores** as oxidation products or as the result of environmental exposure to the oxides of nitrogen...

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Intelligent Textiles Articles
... **Chameleon Fibers**: Dynamic Color ChangeFrom Tunable Moleculand Oligomeric Devices
Author: Richard V. Gregory, leader (TF&PS, Clemson)Timothy Hanks (Furman ...
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... 2001372, Call Me Mister. 2001382, Nonlinear Models for High Spee. 2001383, **Chameleon Fibers**: Color Tunabl. 2001384, Administrative Budget. ...

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Yahoo! Groups : thesilvergarrison2500 Messages : Message 24 of ...
... marvelled at synthetic skin, he even saw the blood pumping underneath it.
Checking
the clip in his PPG pistol, and activating the **chameleon fibers** in his ...
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Clemson University President's Report
... Research by Clemson's Dick Gregory may produce **chameleon fibers** that can respond to an environment and change color or light-sensitive fabrics that can ...
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Show of Force
... Our short hops and fast movement had kept us undetected by sensors and our distance, phototropic '**chameleon**' **fibers** in the armor, and acoustic muffling had ...
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Grass Varieties in the US

... a very dark green color and maintains an attractive **turf** under limited ... Progenies evaluated
and eight parental clones selected for high **chromogen** content, high ...
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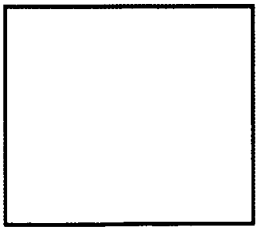
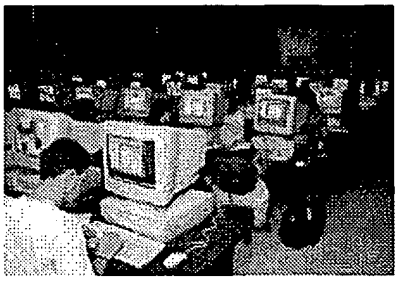
Chameleon Fibers: Color Tunable Molecular and Oligomeric Devices

The creation of field-responsive fibers, chameleon fibers, is a multi-disciplinary endeavor. In addition to electroactive chromophores, polymeric materials able to generate a uniform, stable field for excitation of the color change process must be prepared. The requirements for these polymers include: appropriate electronic and optical properties, chemical compatibility with chromophores, processability and specific structural features. Not all of these requirements have been quantified, and even measuring some of them has required the development of new analytical methodologies. In this report we detail the progress made by the Chameleon Fibers Group over the past few year in designing and evaluating components of chameleon systems.



1999)
A group of 11 professors belonging to the National Association of Scholars have formed programs designed to reacquaint students with the Great Books of Western Civilization. The purpose of the programs, including one at Clemson led by Professor Mark Winchell, is to make sure that undergraduates obtain a solid foundation in Western thought, in light of students' tendency to take a scattershot approach to literature courses.

Los Angeles Times (January 12, 2000)



Research on technologically advanced fibers yields the promise of clothes that can adjust to weather conditions, fend off odors or even transmit data about an individual's location via global positioning systems. Research by Clemson's Dick Gregory may produce chameleon fibers that can respond to an environment and change color or light-sensitive fabrics that can "understand" environmental conditions they are exposed to, such as radiation or chemical or pathological agents. Both could yield useful tools for military uniforms.

The New York Times (March 26, 2000)

The new trend in "wired" universities is requiring students to own a laptop computer or, in some cases, raising tuition enough to have one included as part of enrollment fees. Although as an institution, Clemson has opted to provide students with a "virtual laptop" by giving each student his or her own server space that allows access to a personal desktop from just about any computer on campus, the College of Engineering and Science is experimenting with a laptop requirement for 250 engineering majors as a pilot program.

USA Today (March 31, 2000)

Clemson announced its long-term plans for the Sandhill Research and Education Center in Columbia, which will focus on creating facilities and endowing programs to build a center for research and education on issues facing growing urban areas. Funding for the project is contingent upon the sale of property adjacent to the Columbia-based research center.

USA Today (May 25, 2000)

Clemson's Brooks Sports Science Institute joined with NASCAR team Roush Racing to paint the town - or, at least a car - in Clemson colors as part of an innovative scholarship program. The Clemson color scheme, complete with tiger

Chameleon Fibers: Dynamic Color Change From Tunable Molecular and Oligomeric Devices

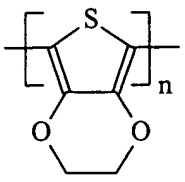
M98-C1

Richard V. Gregory, leader (TF&PS, Clemson)
Timothy Hanks (Furman),
Robert J. Samuels (Chem Eng, Georgia Tech)

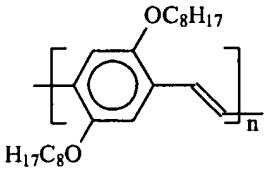
We are designing fibers that can quickly change their color, hue, depth of shade or optical transparency by application of an electrical or magnetic field. We are beginning to identify, characterize and produce some electroactive and magnetoactive oligomeric molecules with unique abilities to change their absorption and/or reflection of electromagnetic radiation in the infrared, visible and ultraviolet frequency ranges. We will introduce these molecules that possess these "tunable" properties into polymeric matrices and process them into fibers and films. We will evaluate them for their optical properties under differing electrical, magnetic and thermal stress and for color changes either as coatings, additives or stand alone fibers. We have already shown that varying the electrical or magnetic field affects the visible radiation absorption and color of these materials.

We have now modeled and synthesized several potential target monomers and oligomers and currently are processing them into fiber and film. We are evaluating these unique materials for the degree and depth of color change by using various processing methodologies. Initial studies include molecules that are derivatized oligomers of different types of electroactive and excitonic polymers such as polyethylene dioxythiophene and di-octyloxy para-phenylene-vinylene (See Figures). These molecules form the initial basis of our investigations into production of true chameleon fibers capable of changing their adsorption characteristics, and therefore their color, under applied electrical or magnetic stress.

We are designing fibers that can quickly change their color, hue, depth of shade or optical transparency by application of an electrical or magnetic field.



Poly(ethylene-dioxythiophene)



di-Octyloxy poly(para-pheylene-vinylene)

[Other Contributors: Graduate Students *Steve Hardaker, Mike Pepitone, Jun Wang, Huaidong Meng* (Clemson); *Runqing Ou, Tao Liu* (Georgia Tech); Post Doctoral: *Xingwu Wang* (Clemson)]

Project Web Site Address:

Richard V. Gregory, an Associate Professor in the School of Textile, Fiber and Polymer Science at Clemson, joined the faculty in 1990. He received his Ph.D. in physical chemistry at Clemson in 1984 and continued with postdoctoral work in polymer spectroscopy whereupon he joined the research staff at Milliken. Dick's research interests include the formation, characterization and potential industrial applications of conductive polymers and the interaction of ultraviolet radiation with polymers.
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http://www.eng.clemson.edu/textiles/faculty/gregory.html

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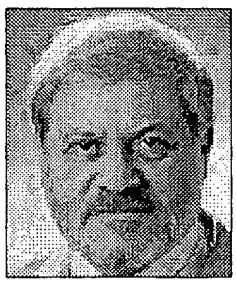
http://www.furman.edu/~hanks/hanks.html

Robert J. Samuels, a Chemical Engineering Professor at Georgia Tech since 1979, received a Ph.D. in polymer chemistry from University of Akron in 1961. During an 18 year career at Hercules, Robert was an Adjunct Professor at the Universities of Delaware and Washington. His research interests include rapid nondestructive characterization of anisotropic polymers, deformation kinetics of polymer systems, and prediction of advanced material behavior. He is author of the book Structured Polymer Properties and the recipient of the 1999 International Research Award of the Society of Plastics Engineers.
robert.samuels@che.gatech.edu
(404)-894-2885



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Search Notes

Attached are the search results for the impact and roll measurement device, including inventor and prior art searches in foreign and international patent databases; and prior art searches in sports and textile and product and general interest non-patent literature databases, and on the Web via the Google search engine.

Also attached is a search feedback form. Completion of the form is voluntary. Your completing this form would help us improve our search services.

I hope the attached information is useful. Please feel free to contact me (phone 305-5934 or email jeanne.horrigan@uspto.gov) if you have any questions or need additional searching on this application.

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